

Order 12325



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D4012-1

Job Sheet 188971



Part No: D4012-1

Job Qty: 500 pcs

Part Name: Cushion



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/17/19

Job Tracking No:

Due Date: 2/3/19

Created By: Dara Macdonald

Type: SOLD

Description:

Note: DWG REV E SHEET 1

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Sign-off
100	Purchasing	500 pcs	2/3/19	2/3/19	0.00	0.00	Purchasing - 1	MAR 01 2019
							Purchasing - 2	
							Purchasing - 3	
110	Packaging 2-1 - Receive - B4B	500 pcs	2/3/19	2/3/19	0.00	0.00	Packaging 2 - 1 - B4B	
							Packaging 2 - 2 - B4B	
							Packaging 2 - 3 - B4B	
							Packaging 2 - 5 - B4B	
							Packaging 2 - 4 - B4B	MAR 01 2019
							Packaging 2 - 6 - B4B	
							Packaging 2 - 7 - B4B	
							Packaging 2 - 8 - B4B	
							Packaging 2 - 9 - B4B	
							Packaging 2 - 10 - B4B	
							Packaging 2 - 11 - B4B	
							Packaging 2 - 12 - B4B	
							Packaging 2 - 13 - B4B	
							Packaging 2 - 14 - B4B	
							Packaging 2 - 15 - B4B	
							Packaging 2 - 16 - B4B	
							Packaging 2 - 17 - B4B	
							Packaging 2 - 18 - B4B	
							Packaging 2 - 19 - B4B	
							Packaging 2 - 20 - B4B	
							Packaging 2 - 21 - B4B	
							Packaging 2 - 22 - B4B	
							Packaging 2 - 23 - B4B	
							Packaging 2 - 24 - B4B	
							Packaging 2 - 25 - B4B	
							Packaging 2 - 26 - B4B	
							Packaging 2 - 27 - B4B	
							Packaging 2 - 28 - B4B	



Container No: S157948



Part: D4012-1

Job No: 188971

Serial No/Batch: S157948

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

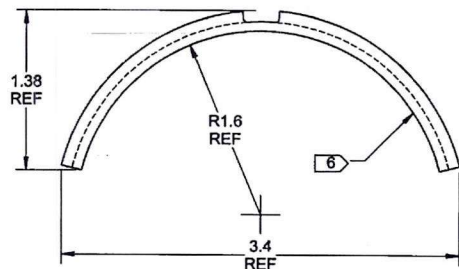
Date: 03/01/19

Plex 1/17/19 10:06 AM Dart.Macdonald.Dara

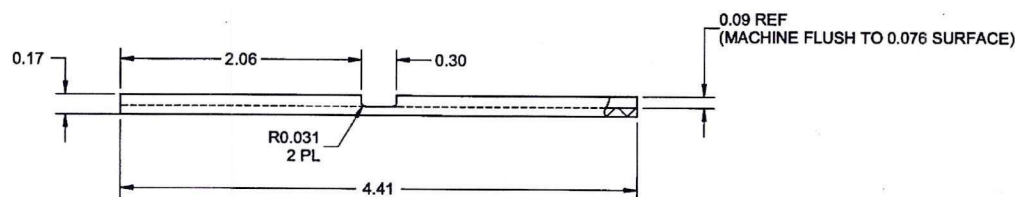
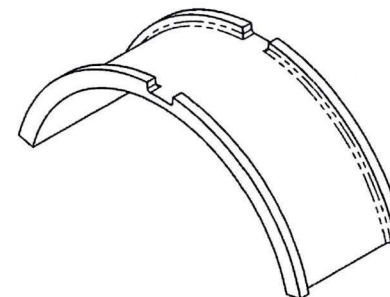
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
120 QC 6	500 pcs	2/3/19	0.00 0.00		QC 6 - 38	
					QC 6 - 42	
					QC 6 - 9	
					QC 6 - 68	DAS MAR 01 2019 68
					QC 6 - 61	9-89
130 Packaging 3-2 - Stock - B4B	500 pcs	2/3/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	ST54674 82 MAR 05 2019
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
140 QC 21 - SA	500 pcs	2/3/19	0.00 0.00		QC 21 - SA - 21	
					QC 21 - SA - 70	DAS 21 MAR 06 2019 9-89
Part Op 100 - (Purchasing) Mill as per folio FA889 Dwg. rev: _____						
Descriptions: 110 - (Receive & Inspect for Damage & Mat'l Certs)						
120 - (QC6- All purchased or subcontracted products)						
130 - (Identify as per dwg & Stock Location: _____)						
140 - (QC21- Final Inspection - Work Order Release)						
Job BOM						
Part / Item	Component Name	Quantity	Operation	Container		
D4012-1F	Cushion	500 pcs (1 ea)	100-Purchasing	S157947		

Job Allocations					
Operation 100-Purchasing	Component Part D4012-1F	Required 500	Inventory 0	Allocated 0	
Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Cushion	1.250Inches ± 0.030	1.280 1.220		
2	Cushion	1.050Inches ± 0.010	1.060 1.040		
3	Cushion	0.100Inches ± 0.030	0.130 0.070		
4	Cushion	4.410Inches ± 0.030	4.440 4.380		
5	Cushion	0.076Inches + 0.015 - 0.000	0.091 0.076		
6	Cushion	0.170Inches ± 0.030	0.200 0.140		
7	Cushion	0.031Inches ± 0.010	0.041 0.021	Radius	
8	Cushion	0.300Inches ± 0.030	0.330 0.270		

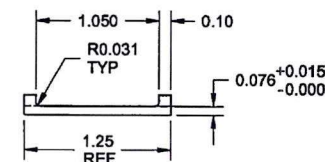
Plex 1/17/19 10:06 AM Dart.Macdonald.Dara



D4012-1 CUSHION
(MAKE FROM D4012-1F)
(COLD FORMED DURING INSTALLATION, DIMS REFERENCE ONLY)



D4012-1F FLAT CUSHION 1



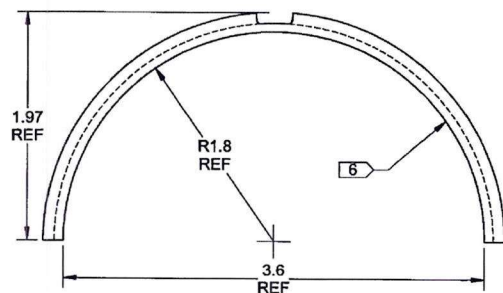
NOTES:

- 1) MATERIAL: MAKE FROM D4287-3 OR VIRGIN GAR-DUR UHMW-PE, NATURAL, (GARLAND MANUFACTURING COMPANY)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

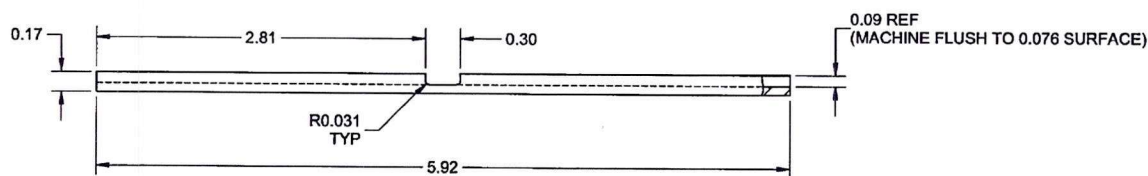
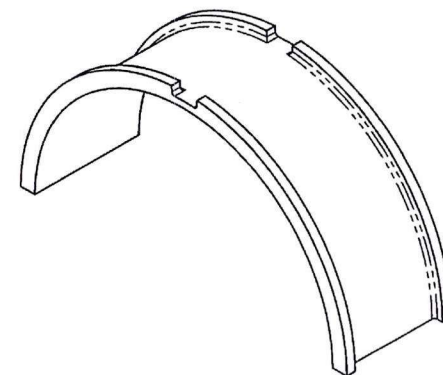
E	ADD PURCHASING OPTION- NEW SUPPLIER, CIR 18-69	DB	16.05.09
D	ADDED -3 SEE PAR 15-458.	AJS	15.09.17
C	ADD 0.30 NOTCH, 2 PL, ADD COLD FORM NOTE, REF DIMS FOR D4012-1 REASON: PAR 14-331, NCR 14-3521	DB	14.09.22
B	CHANGED RAW MATERIAL TO REDUCE MANUFACTURING COSTS; PART NOW MACHINED FLAT AND SHAPED WITH RADIUS. REF: PAR10-29	MB	10.12.07
A	NEW ISSUE	MB	09.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	ML	DRAWING NO.	REV. E
MFG. APPR.	DD	D4012	SHEET 1 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	CUSHION	NTS
DATE	16.05.09	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2016-11-09
ECN16-668

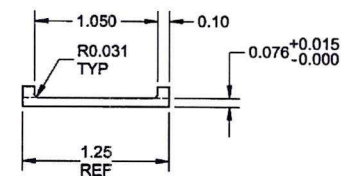
APPROVED



D4012-3 CUSHION
(MAKE FROM D4012-3F)
(COLD FORMED DURING INSTALLATION, DIMS REFERENCE ONLY)



D4012-3F FLAT CUSHION 1



NOTES:

- 1) MATERIAL: MAKE FROM D4287-3 OR VIRGIN GAR-DUR UHMW-PE, NATURAL, (GARLAND MANUFACTURING COMPANY) 
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

RELEASED
2016-11-09

APPROVED

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	ML	DRAWING NO.	REV. E
MFG. APPR.	DD	D4012	SHEET 2 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS-#	CUSHION	NTS
DATE	16.05.09	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042319



Supplier: GAR001-VU
Garland Manufacturing Co.
P.O. Box 538
Saco, ME 4072 USA
Phone: 207-283-3693
Fax: 207-283-4834

PO No: PO042319

PO Date: 1/18/19

Due Date: 2/27/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

EC-MAILED
JAN 18 2019

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	188971	D4012-1F		Cushion : AS PER DWG D4012 REV. E	Firmed	-	2/27/19	500 pcs	0 pcs	500 pcs	\$2.64/pcs	\$1,320.00
Grand Total: \$1,320.00												

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

CL

Plex 1/18/19 9:02 AM dart.lavoie.chantal

GARLAND MFG COMPANY
P.O. BOX 538
SACO, ME 04072
(207) 283-3693

GAR-DUR PLASTIC

RAWHIDE
MALLET AND HAMMERS

Shop Floor Copy

Order Number: 0197221

Order Date: 1/21/2019

Salesperson: 71F

Customer Number: 30-0615903

Sold To:

DART AEROSPACE OEM
1270 ABERDEEN STREET
HAWKESBURY, ON K6A1K7

Confirm To:

Ship To:

DART AEROSPACE OEM
1270 ABERDEEN STREET
HAWKESBURY, ON K6A1K7

Customer P.O.	Ship VIA	Requested Date	Terms
PO042319 ✓	UPS COLLECT	2/20/2019	Net 30 Days
Product Code	Description	Units	UOM
310001	FABRICATED PART	500.00	EACH
PN: D4012-1F ✓ TO DWG: D4012 REV E SEE JG FOR CERTS EMAIL			

499

Approx WT: 0.00

Date Shipped	BDL or Carton	Weight	Quantity
2/25/19	1	11	500 pcs



Industrial Plastics
Ultra-High Molecular Weight Polyethylene

55 Industrial Park Road
POB 538
Saco, Maine 04072

Specialty Striking Tools
Garland Rawhide Hammers & Mallets

PH: 207/283-3693
FX: 207/283-4834
<http://www.garlandmfg.com>

Dart Aerospace
Attn: Linda Lacelle
1270 Aberdeen St.
Hawkesbury, ON K6A1K7
Re: PO #042319 Quality Clauses A017 and A026
Date: February 25, 2019

Linda:

A026

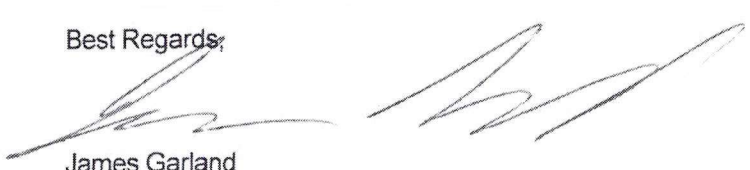
Please be advised that Garland Manufacturing, located in Saco, Maine, USA, hereby certifies that the material provided by this company for your PN: D4012-1F on PO # 042319 meets or exceeds ASTM Specification D-4020-05a, the current ASTM specification for Ultra-High Molecular Weight Polyethylene; also known as UHMW or UHWM-PE. Garland Mfg. Company only processes UHMW-PE material at the upper end of the molecular weight range. Our virgin GAR-DUR® UHMW plastic is made from resin with an I.V. of 24 and above with a minimum molecular weight of 4.2 million.

A017

Your parts were produced from the following Resin Lot:

Celanese resin GUR 4152 Batch #00001084171, Rail car : ACFX040639 , See attached Quality Certificate

Best Regards,



James Garland
Garland Manufacturing Company
jgarland@garlandmfg.com
800/727-1900 x 45



GARLAND MANUFACTURING
55 INDUSTRIAL PARK RD
SACO ME 04072
USA

Bill Kramer
Phone: 207-283-3693
Fax: 207-283-4834

Bishop, TX - Ticona
Ticona Polymers
5738 County Road 4
Business 77 South
BISHOP TX 78343
USA

Type 2 Certificate of Analysis

GUR 4152 B RC (W4)

Formula No.:	GUR 4152	Cert Issue Date:	19 Jul 2018
Catalog:	20003859	Qty Shipped:	126,750.000 LB
Color No.:	NATURAL	Order Item /date:	1947288 30 / 16 Jan 2018
Produced at:	Bishop, TX, USA	Delivery Item/date:	85720939 30 / 16 Jul 2018
		Account #:	2067442
		Customer PO No.:	26604
		Rail car:	ACFX040639

Batch 0001084171

In reference to the above, this is to advise you that this is a standard product and meets the following requirements:

BATCH RELEASE DATA	UoM	Value
Intrinsic Viscosity	decitr/gm	28
Bulk density	g/cm ³	0.49
Extraneous Material		0
Particle Size > 500µm	%(m)	0
Particle Size < 63µm	%(m)	2
Particle Size (D50)	µm	176
Calcium Stearate	ppm(m)	624

These test data are determined based on standard ISO and/or ASTM testing procedures.

GUR Global Business Line

If you have questions regarding this letter, please call your Customer Service Team at 800-526-4960.